2. Revisions to the Draft EIR

The following section provides minor revisions or corrections to information presented in the Draft EIR. The changes to the Draft EIR presented in this section do not represent substantial revisions to the information presented in the Draft EIR that was circulated for public review. No new significant project impacts have been identified since the Draft EIR was distributed for review.

Project Description Changes

Upon further investigation by the CDWR, it was determined that approximately 7 acres in the southwest corner of the proposed land acquisition area would be excluded as mitigation land, as it contains hunt club facilities. As such, the land to be acquired for mitigation purposes would be equivalent to approximately 232 acres, rather than 239 acres as referenced in the Draft EIR. The CDWR would also purchase approximately 340 acres specifically for the Tehachapi East Afterbay Project.

Updates to the project design eliminated the need for rock slope protection south of the main spoil area (Spoil #1), which reduces the permanent impacts of the proposed project by 12.5 acres. Additionally, the bypass system, which was originally designed to be above-ground, was redesigned to be placed underground; thereby changing the 6 acres of permanent impact associated with the bypass system to a temporary impact. Other design changes include the addition of a drainage berm spoil pile located north of the reservoir, which accounts for an additional 13 acres of permanent impacts. Therefore, the total permanent impacts associated with the proposed project would be 193 acres (198.5 - 12.5 – 6 + 13) or as much as 210 acres with the inclusion of the potential supplemental spoil pile (Spoil #2 = 17 acres). Based on permanent impacts of 210 acres and purchase of 232 acres of mitigation land, the project would meet a mitigation compensation ratio minimum of 1 to 1. Due to the redesign of the bypass system as an underground system, which would be a temporary impact (6 acres), and the addition of the impacts associated with the road located north of the reservoir (6 acres), which was not previously defined in terms of type of impact or acres of impact, temporary impacts associated with the proposed project would increase from 64.5 to 76.5 acres.

Other project design changes include the addition of an asphalt mixing plant, which would consist of typical temporary batch or drum plant equipment such as a mixing drum, material silos and chutes, storage tanks, conveyor belts, and internal combustion (IC) engine(s) as necessary to power the plant. The plant would be located within the general work area defined in Figure 2-5 of the Draft EIR. Raw materials would be stored adjacent to the plant. The materials stored at any one time may consist of only those required for several days of placement. Larger aggregates would likely be stored in a simple pile. The asphalt and other products would be stored in approved containers, tanks, or silos. The asphalt mixing plant and related facilities would be used to store, heat, combine, and mix asphalt, aggregate, and additives. The plant and facilities would produce approximately 60,000 tons of Hydraulic Asphalt Concrete (HAC) for reservoir and channel liner and 6,000 tons of Asphalt Concrete for roadway pavement. Up to about 8,000 tons of the Asphalt Concrete may be mixed off-site and transported to the site for placement. In addition, approximately 200,000 gallons of Asphalt Mastic would be used as HAC sealer, and 180,000 gallons of Asphalt Emulsion as subgrade preparation. The majority of the HAC is expected to be mixed and placed between August 10, 2005, and November 1, 2005. To meet the permitting requirements of the Kern County Air Pollution Control District, the plant would be fueled by natural gas or propane with Lo-NO_x burner(s), have a fabric collector for PM_{10} control, and any stationary IC engines used would be rated Tier 2 or better. Waste generated from the asphalt mixing plant may include aggregate dust;

surplus or rejected asphalt concrete mixes, mastic, asphalt emulsion, or mix components; rinse solutions and asphalt release agents from cleaning of equipment; and exhaust from fuel. The construction contractor would be responsible for proper removal and disposal of all waste products in accordance with all applicable rules and regulations.

In addition to the above changes, the project construction schedule has also been revised. Construction of the Tehachapi East Afterbay would occur over a 24-month period, and is scheduled for January 2005 to January 2007. While the air quality impacts discussed in the Draft EIR Section 3.1.4.3 are based on a 17-month construction schedule, which provides for a conservative estimate, the proposed project is expected to continue to exceed daily and annual construction emission thresholds for NO_x and PM_{10} based on a 24-month construction schedule.

For the above changes, updates to mitigation measures, tables, and figures are provided below. None of these project changes result in changes to any of the Draft EIR's conclusions regarding the significance of project impacts, nor would they cause any new significant impacts.

Individual changes throughout the text of the Draft EIR to incorporate these changes are not provided, but are instead covered by this overall project change description.

Executive Summary

Table ES-1 on pages ES-7 and ES-8 has been updated to reflect the change in acreage of permanent impacts (see Project Description Changes above), and to make minor revisions to mitigation measure BIO-5.

Table ES-1. Summary of Impacts and Mitigation Measures Identified in the EIR

Project construction or operation may affect habitat used by bird species that are federal and/or state species of concern, protected by the Migratory Bird Treaty Act and protected by the California Fish and Game code; sensitive or special status species may be present in the area at the time of construction or during operational activities.	II	BIO-4	The CDWR shall develop and implement a Habitat Enhancement Plan for an acreage equivalent to <u>at least</u> ~~1.1~~ acre~~s~~ for every acre of habitat permanently affected by the project (i.e., ~~215.5~~ <u>210</u> acres). The enhancement area shall be located approximately southwest of the proposed Tehachapi East Afterbay project site incorporating part of the Oso Creek drainage. The goal of the Plan shall be to improve habitat resources similar to those that will be lost at the proposed project site. Some of the measures that shall be considered include installation of owl boxes or burrows, establishment of woody species or other plant species suited to existing hydrological conditions along the Oso Creek drainage, restoration of soil flora and fauna, reestablishment of hydrological connections, and control of exotics. Species known to already exist at the site based on survey lists provided in Appendix C or from other surveys within the project area shall be preferred in any revegetation effort. The Plan shall also consider the feasibility and effectiveness of transplanting plants or collection of seed from plants that will be impacted by the project footprint. The Plan shall provide measures to address incidental disturbance or impacts caused by implementation of any of the enhancement measures identified in the Plan. The Plan shall also incorporate mitigation measures BIO-14 and BIO-15 as well as other measures to improve habitat quality within the enhancement area. The Plan shall be submitted to the California Department of Fish and Game (CDFG) for their review.
		BIO-5	Pre-construction bird surveys shall be conducted to identify the presence of breeding pairs or active nests of special status bird species, species protected by the Migratory Bird Treaty Act (MBTA), or species protected by the California Fish and Game Code, within the project and construction footprint plus an additional buffer distance of 500 feet. The surveyed area, including the 500 foot buffer, shall also include existing and newly proposed access roads to the project site. Existing roads need to be included in the survey because of the anticipated increase in traffic disturbance and because portions of some

Table ES-1. Summary of Impacts and Mitigation Measures Identified in the EIR

			existing roads are overgrown with vegetation. In the event that surveys indicate habitat occupied by breeding pairs or active nests of special status bird species, species protected by the MBTA, or species protected by the California Fish and Game code within 500 feet of the project or construction footprint, some or all of the following measures shall be implemented: • The occupied area plus an additional no disturbance zone will be flagged and/or fenced until a qualified biologist has determined that all young have fledged. The size of the no disturbance zone shall be determined in consultation with the CDFG and/or the United States Fish and Wildlife Service (USFWS). • To the extent feasible ~~C~~clearing and grubbing of vegetation shall be conducted during the months prior to March 1 and after July 30. CDWR shall consult with CDFG and USFWS when work schedules conflict with this general guideline and impacts to nesting birds protected under the MBTA or the California Fish and Game Code are imminent. • Where ambient noise levels are less than 60 dBA and it is determined that construction related noise will cause noise levels to exceed 60 dBA, or where the ambient noise levels are greater than 60 dBA and it is determined that construction related noise will cause noise levels to exceed the ambient level by 5 dBA, a temporary sound wall shall be constructed between the sensitive area and the construction related noise source. Monitoring shall be conducted at 50 feet and 100 feet from the sound wall or at the boundary of the sensitive habitat if the habitat is more than 100 feet from the construction site. This measure would be applicable to survey areas that yield positive results and would be limited to the breeding and nesting season for the sensitive bird species identified in the surveys. • Night lighting shall be carefully aimed, shielded and of the minimum reasonably necessary intensity to reduce illumination spillover from work areas that may impact migratory birds or plants and animals, in general. • If an active bird nest will be affected by construction activities within 500 feet of the nest, work shall be temporarily suspended within an appropriate buffer area as designated by the CDWR Mitigation Monitor.

Table ES-1 on pages ES-9 and ES-10 has been updated to (1) update when coast horned lizard surveys would be conducted, (2) correct the references to previous mitigation measures, (3) reflect the changed status of operational biological impacts, and (4) provide minor editorial changes. See edits to Section 3.2.4.2 – Project Impacts (Biological Resources), pages 3-49 through 3-51, below.

Table ES-1. Summary of Impacts and Mitigation Measures Identified in the EIR

Project construction is likely to affect the coast horned lizard and its habitat; mitigation measures that can feasibly be implemented will not be completely successful in avoiding a loss of individuals and their habitat.	I	BIO-10	Focused surveys for the coast horned lizard shall be conducted within the unnamed drainage and the alluvial floodplain to the east, south of spoil pile #1, that present suitable habitat conditions for the lizard and that may be temporarily disturbed during construction and permanently affected by the bypass, access roads and rock slope protection. Surveys shall be conducted in ~~September/October~~ the fall of 2004 when the species is more active prior to winter hibernation. The surveys shall be conducted using established protocols to maximize the likelihood of observing the species, and shall rely on a combination of several walking surveys at times of the day when coast horned lizards are most active and scat surveys to indirectly estimate population size. The objective of the surveys is to estimate the extent of occupied habitat that overlaps with temporarily and permanently impacted areas. The estimated occupied area will be delineated on a map, flagged in the field and made available to all project personnel. This measure shall be planned and implemented in coordination with CDFG.
		BIO-12	Despite the fact that exclusion, capture and relocation measures typically implemented to reduce impacts to coast horned lizards would be relatively ineffective during the winter months when the initial ground disturbance will occur, CDWR will consult with the CDFG to determine if such measures may still be implemented in such a way as to have a partial effect on reducing impacts to coast horned lizards. In addition, a Biological Monitor(s) will be present to

Table ES-1. Summary of Impacts and Mitigation Measures Identified in the EIR

			capture coast horned lizards that are disturbed from their habitat and that are at risk during the initial ground disturbance. A protocol will be established in coordination with CDFG prior to ground disturbance to define the method of capture, handling and relocation of any coast horned lizards. Surveys defined in ~~BIO-9 and~~ BIO-10 and BIO-11 will assist in establishing whether suitable relocation habitat may exist within the enhancement area defined in BIO-4.
Project operation will affect sensitive species and their habitat.	~~II~~ III	~~BIO-13~~	~~Fine-mesh or metal exclusion fence shall be added to the bottom 18 inches of the reservoir fence to reduce entry of small mammals and reptiles.~~ None required.
Project construction will affect segments of the unnamed drainage and Oso Creek, which are under the jurisdiction of the California Department of Fish and Game.	II	BIO-16	Temporary improvements that may be needed for the southern project access where it across Oso Creek shall be done while the drainage is dry. Because this is an ephemeral drainage, ~~it is feasible to carry out any~~ improvements can be made while the drainage is dry without the need to divert flows. To the extent feasible, ~~V~~vehicles shall not be driven or equipment operated in water-covered portions of a stream or where riparian vegetation or aquatic organisms may be destroyed. The CDFG shall be consulted when construction activities can~~-~~not avoid water diversion.

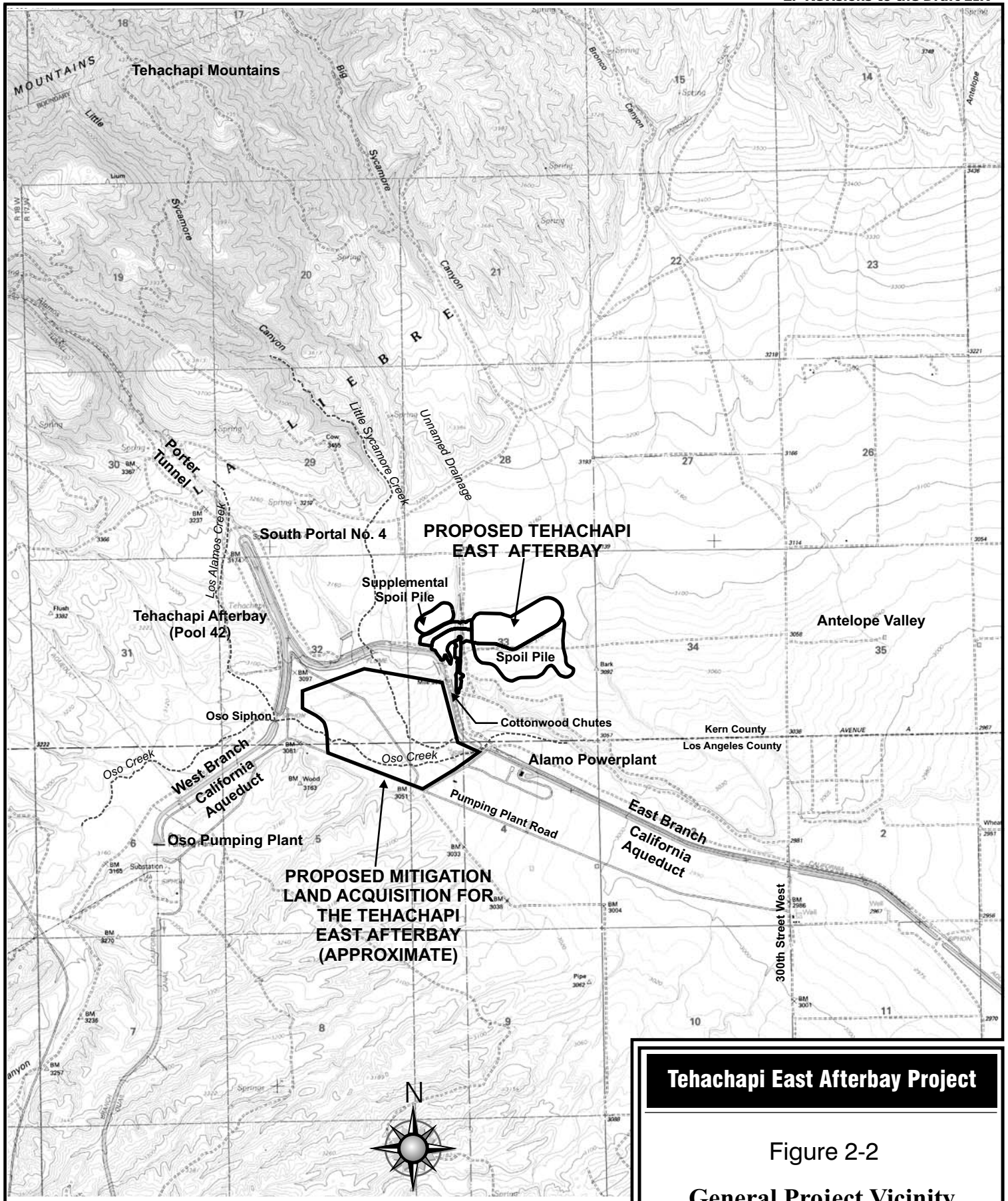
Section 2.1 – Background

Figure 2-2 on page 2-3 has been updated to reflect recent project changes, which reduces the proposed mitigation land acquisition area from 239 acres to approximately 232 acres (see Project Description Changes above).

Section 2.4 – Project Description

The first paragraph on page 2-10 under "Bypass" has been revised to reflect the redesign of the bypass system as an underground system.

> A bypass structure would be constructed to provide East Branch deliveries during remediation of the existing canal (Pool 42), and to provide a permanent bypass around Alamo Powerplant and Cottonwood Chutes. The bypass would have a capacity of 3,150 cfs, and consist of a ~~30~~**40**-foot-wide **(maximum)** concrete turnout structure located in the outlet channel, a **1,500 foot long** buried ~~12-foot by 12-foot~~ double-box concrete culvert, and a ~~35-foot by 150-foot~~ stilling basin that discharges **water into the existing East Branch between** ~~immediately downstream of~~ Cottonwood Chutes **1 and Cottonwood Chutes 2**. ~~The total length of the bypass facility would be approximately 1,500 feet~~. Two 12-foot ~~by 8-foot~~ **wide** slide gates would control discharge ~~into~~ **from** the turnout structure. **The buried conveyance from the slide gates to the stilling basin would consist of two 10-foot by 10-foot concrete box culverts. The conveyance structure would transition from a buried to exposed structure as the bypass discharge merges into the existing Aqueduct.** The existing drainage channel would be returned to original condition throughout most of the length of the bypass. To safely convey natural flows along the southern end of the bypass, improvements would be constructed near the new stilling basin and would include grading and installation of erosion protection (rock slope protection) along the west side of the channel, similar to what currently exists at that location.



Tehachapi East Afterbay Project

Figure 2-2

General Project Vicinity

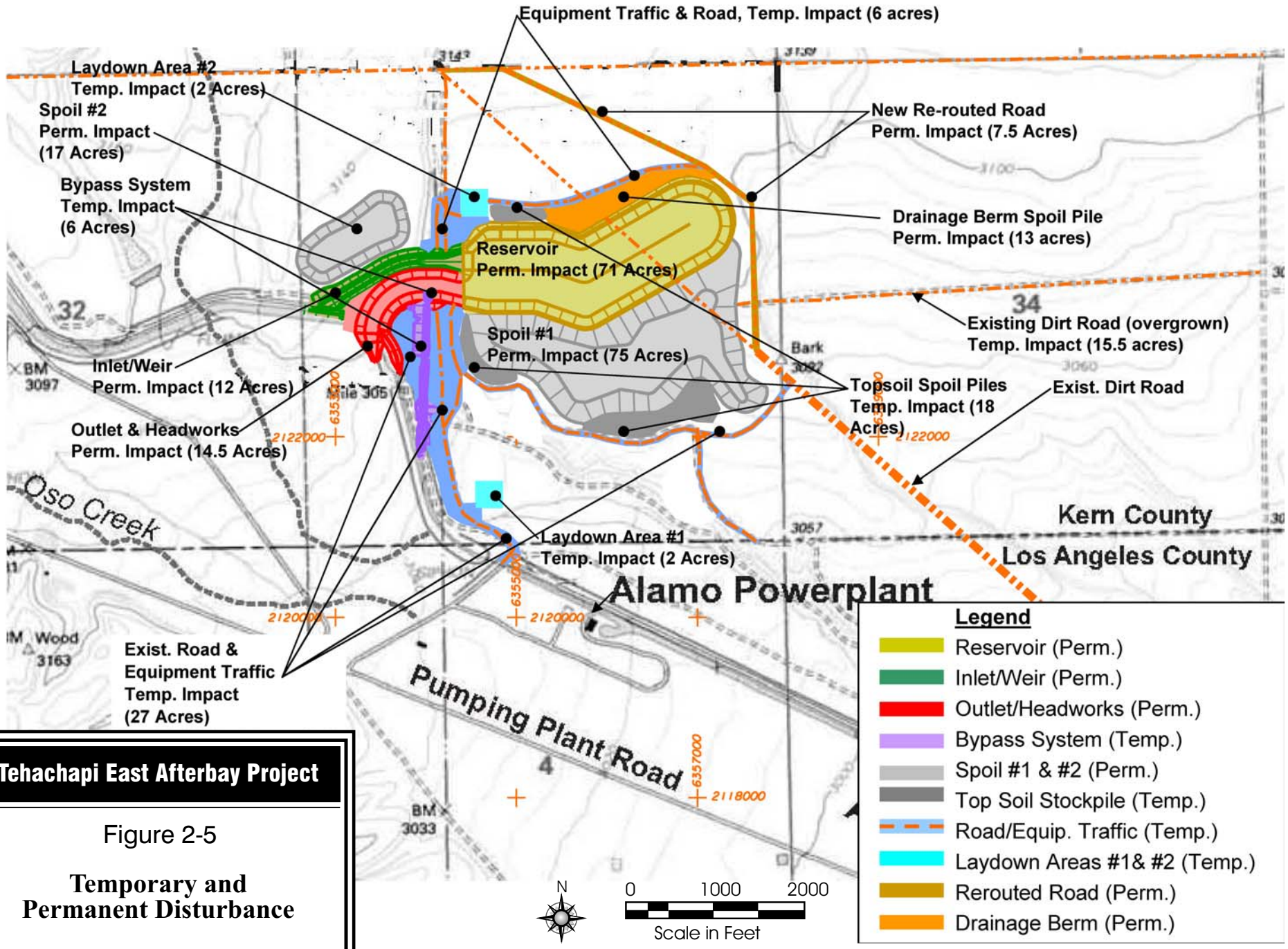
The first paragraph on page 2-11 has been revised as follows:

> Local drainage improvements within the proposed project site would include providing a concrete culvert within the existing drainage channel with approximately 100 feet of rock slope protection to avoid erosion and undercutting of the culvert, as well as **a drainage berm spoil pile placed immediately north of the reservoir cut slope to mitigate erosion of the cut slope** ~~various areas along the existing sloping face south of the proposed project area~~ (see Figure 2-5). **Runoff from the north would be diverted by the drainage berm spoil pile either east towards the Big Sycamore Canyon drainage channel or west to the unnamed natural drainage channel. To protect the side slopes for both the natural drainage channel and Big Sycamore Canyon, drainage would be conveyed into an 18" corrugated metal pipe (CMP), which would take flows down the bank to the channel bottom. The outflow from the 18" CMP would discharge to a 10-foot by 10-foot area covered by rip rap (rock slope protection).** Materials for erosion protection (and the temporary cofferdam) may come from as nearby as the quarry operated by B & B Materials, Inc., located approximately a mile north-northwest of the proposed project site. It should be noted that the existing drainage channel would be largely unaffected by the construction of the bypass culvert structure (CDWR 2004g).

The first paragraph under "Project Construction Details" on page 2-11 has been revised as follows:

> Construction of the Tehachapi East Afterbay is expected to occur over a ~~17~~**24**-month period, and is tentatively scheduled for ~~February~~ **January** 2005 to ~~June 2006~~ **January 2007**. An average of 65 workers would be required during construction with a peak on-site crew of approximately 100 workers, which would be anticipated to occur between July 2005 and January 2006 when both the reservoir contractor and the Headworks/Structures contractor would be working at the proposed project site (CDWR 2004i). Workers would generally commute from the Bakersfield, Los Angeles, Lancaster, or Frazier Park areas, with an assumed average commute of 70 miles each way (140 miles roundtrip) (CDWR 2004h). The length of a typical construction workday would be eight hours per day, five days per week, although during reservoir excavation activities, one shift of ten hours per day, six days per week is anticipated. During critical periods of construction, such as outage periods, two 12-hour shifts may also be utilized (CDWR 2004i). A total of 10,029 haul truck trips are estimated to occur during construction, as discussed in Section 3.1, with commute distances as short as 30 miles (Lancaster) and as far as 200 miles (Port of Los Angeles). The estimate of haul truck trips assumes that concrete would be imported to the project site, whereas the construction contractor may elect to use an on-site mobile concrete batch plant and screening plant, which would substantially reduce the number of truck trips required during construction.

Figure 2-5 on page 2-13 has been updated based on the project design changes discussed above (see Project Description Changes). Rock slope protection has been removed from the project design, the bypass system is now shown as a temporary impact, and a drainage berm spoil pile has been added north of the reservoir area and identified as a permanent impact.



Source: CDWR Division of Engineering

Tehachapi East Afterbay Project

Figure 2-5

Temporary and Permanent Disturbance

INTENTIONALLY LEFT BLANK

Section 2.6 – Intended Uses of the EIR and Other Public Agency Actions

Table 2-1 on page 2-19 has been modified to incorporate the asphalt mixing plant.

Table 2-1. Required Permits and Approvals

Agency	Permit/Approval Needed
California Department of Fish and Game (CDFG)	Notification for Streambed Alteration (may result in a determination that a Section 1602 Streambed Alteration Agreement is needed)
Kern County Air Pollution Control District (KCAPCD)	Authority to Construct/Permit to Operate will be required for the asphalt mixing plant, and may be required for an on-site concrete batch plant and screening plant (if required by the construction contractor), and for the emergency generator (if the manufacturer's maximum continuous rating is greater than 50 brake horsepower).
State Water Resources Control Board (SWRCB)	General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit 99-08-DWQ).
Lahontan Regional Water Quality Control Board (RWQCB)	General Waste Discharge Requirements for Small Construction Projects, Including Utility, Public Works, and Minor Streambed/Lakebed Alteration Projects (R^T-2003-0004). This permit regulates dredging and minor stream alterations within surface waters of the State when 401 Water Quality Certification is not applicable (for non-federal waters).
Federal Energy Regulatory Commission (FERC)	Approval of use of project land for non-project purpose.
California Department of Conservation	Notification of acquisition of land currently under Williamson Act contract.
Kern County	Notification of acquisition of land currently under Williamson Act contract.

Delete Figure 2-5 following page 2-19. This figure appears in the correct location on page 2-13.

Section 3.1.2.3 – Air Quality Plans, Policies, and Regulations

Table 3-2 on page 3-5 has been modified to correctly display the current attainment status in the project area.

Table 3-2. Attainment Status for Eastern Kern County and Antelope Valley

Pollutant	Attainment Status Eastern Kern County		Attainment Status Antelope Valley	
	Federal	State	Federal	State
Ozone – One hour	~~Serious Nonattainment~~ Attainment [a]	Moderate Nonattainment	Severe -17 Nonattainment [d]	Extreme Nonattainment [b]
Ozone – Eight hour	Nonattainment	---	Moderate Nonattainment	---
CO	Unclassified/Attainment [c]	Unclassified	Unclassified/Attainment [c]	Attainment
NO_2	Unclassified/Attainment [c]	Attainment	Unclassified/Attainment [c]	Attainment
SO_2	Attainment	Attainment	Attainment	Attainment
PM_{10}	Unclassified	Nonattainment	Unclassified	Nonattainment
$PM_{2.5}$	Unclassified [~~f~~e]	Unclassified [e]	Unclassified [~~f~~e]	Unclassified [e]
Lead	No Designation	Attainment	No Designation	Attainment

Source: CARB 2004a.

a. **On June 21, 2004 the Kern County Air Pollution Control District (the East Kern Planning Area) was officially redesignated by the USEPA as "attainment" for the one hour NAAQS. (http://www.epa.gov/otaq/url-fr/fr22ap04.pdf)** ~~The Kern County Air Pollution Control District is in the process of filing an "Ozone Attainment Demonstration, Maintenance Plan, and Redesignation Request" with CARB and USEPA. Eastern Kern County has attained the 1-hour ozone NAAQS of 0.12 ppm. Attainment is achieved when each air monitoring station experiences no more than an average of one exceedance day per year for three consecutive years.~~

b. The Antelope Valley Air Quality Management District is classified as extreme nonattainment due to historical South Coast Air Basin designation.

c. Unclassified/Attainment – The attainment status for the subject pollutant is classified as either attainment or unclassified.

d. "Severe–17 Nonattainment" requires the district to attain the ozone standard within 17 years (1990-2007).

~~e. Proposed State $PM_{2.5}$ attainment status from 2003 Staff Report Attachment B - Proposed Amendments to the Area Designations available at: http://www.arb.ca.gov/desig/desig03/desig03.htm.~~

~~f~~**e**. Proposed Federal $PM_{2.5}$ attainment status recommended by the California Air Resources Board on February 11, 2004. The USEPA plans to finalize $PM_{2.5}$ designations by December 15, 2004 http://www.arb.ca.gov/desig/pm25desig/pm25desig.htm).

The final paragraph on page 3-5 has been revised as follows:

KCAPCD was designated by the USEPA as a separate ozone planning area in October 2001 (USEPA 2001). In May 2003, KCAPCD's Board of Directors approved an "Ozone Attainment Demonstration, Maintenance Plan, and Redesignation Request," which shows that KCAPCD has attained the one-hour average NAAQS for ozone (KCDB 2003). After approval, KCAPCD's Ozone Attainment Demonstration was submitted to CARB for approval and submittal to USEPA as a SIP amendment. **On June 21, 2004 the USEPA approved the East Kern County one-hour ozone maintenance plan as a revision to the East Kern County portion of the California SIP (http://www.epa.gov/otaq/url-fr/fr22ap04.pdf).** The Ozone Attainment Demonstration document is not an attainment plan, as it does not describe additional emission control measures to be developed and implemented for the purpose of attaining air quality standards.

Section 3.1.4.3 – Project Impacts (Air Quality)

The second and third paragraphs on page 3-20 have been revised to reflect the new 24-month construction schedule.

Emission Thresholds (Criterion A2)

Construction

Construction of the Tehachapi East Afterbay would result in short-term impacts to ambient air quality in the study area during construction, which is tentatively scheduled for ~~February~~ **January** 2005 to ~~June 2006~~ **January 2007**. Temporary construction emissions would result from on-site activities, such as surface clearing, excavation, stockpiling of soils, ~~and~~ compaction, **and operation of the asphalt mixing plant,** and from off-site construction emissions from construction related haul trips and construction worker commuting patterns. Pollutant emissions would vary from day to day depending on the level of activity, the specific operations, and the prevailing weather.

Construction equipment would include machinery such as scrapers, water trucks, compactors, dump trucks, graders, bulldozers, loaders, excavators, asphalt paving equipment, cranes, and concrete pump trucks (CDWR 2003a). Table 3-11 presents the construction schedule based on the anticipated construction activities and the proposed equipment usage during each half-month of construction. **The data presented is for a 17-month construction schedule. This would represent a worst-case scenario for air quality emissions, since the construction schedule has been lengthen to 24 months as a result of recent project design development.**

The first paragraph on page 3-23 has been revised as follows:

As shown in Table 3-12, daily construction emissions would be significant for NO_x and PM_{10} **based upon the worst-case scenario of a 17-month construction schedule; however, this estimate does not include the emissions associated with the asphalt mixing plant, which was a late addition to the proposed project. The emissions associated with the asphalt mixing plant would result in a moderate increase in CO, NO_x, PM_{10}, and VOC emissions. Alternatively, with the extended construction schedule of 24 months, it is likely that air pollutant emissions would also decrease slightly. With these changes to the air quality calculation basis, the emissions would still be**

significant for NO_x and PM_{10}, and may also result in an exceedance of the CO daily emissions limit. The proposed project ~~but~~ would not **exceed the thresholds of significance** ~~be significant~~ for ~~CO,~~ SO_x~~,~~ and VOC. Additionally, the total project NO_x and PM_{10} emissions provided in Table 3-13 averaged over the ~~17~~**24**-month construction period would exceed the annual emissions thresholds provided in Table 3-10 (NO_x = ~~78~~**55** tons/year >25 tons/year and PM_{10}= ~~340~~**241** tons/year > 15 tons/year). **The total project CO emissions with the addition of the asphalt mixing plant would not exceed the annual emissions threshold of 100 tons/year.**

The first paragraph on page 3-24 has been revised as follows:

These mitigation measures would reduce the impacts due to construction of the Tehachapi East Afterbay; however, impacts from **CO,** NO_x, and PM_{10} emissions would still be significant. Therefore, the proposed project would result in a significant unavoidable impact (**Class I**) to air quality (**CO,** NO_x, and PM_{10}) during construction. A Statement of Overriding Considerations will be required to proceed with the proposed project.

The first paragraph on page 3-26 has been revised as follows:

Odors (Criterion A5)

Diesel emissions from construction equipment may create objectionable odors. These odors would be temporary and would not affect a substantial number of people. **Odor associated with operation of the asphalt mixing plant during construction would be limited through the permit requirements of the KCAPCD, which would require that odors not be generated in quantities that would cause nuisance or annoyance to any considerable number of persons or to the public (Rule 419).** Operation of the proposed project would not result in objectionable odors, as regular maintenance of the Aqueduct includes treating the water several times a year with copper sulfate to control algae growth. Therefore, construction and operation of the proposed project would not create objectionable odors. Impacts due to odors would be less than significant (**Class III**).

Section 3.2.4.2 – Project Impacts (Biological Resources)

The third paragraph on page 3-44 has been revised as follows:

The proposed project would temporarily affect approximately ~~64.5~~ **76.5** acres, and would permanently affect approximately ~~215.5~~ **210** acres of terrestrial habitat for construction of project facilities. Figure 2-5 illustrates the temporarily and permanently impacted areas. All temporarily impacted areas would be revegetated when construction is complete. Immediately southwest of the proposed project site, on the other side of the Aqueduct, ~~239~~ **232** acres would be set aside to compensate for permanent losses (see Figure 2-2). **Per CEQA Guidelines Section 15126.4 (a)(4)(B), "The mitigation measure must be 'roughly proportional' to the impacts of the project." As such, the selected mitigation land is located in the same vicinity as the land being impacted by the proposed project, and is of similar habitat quality (in-kind) as the impacted land. This land also contains ephemeral drainages containing elements of riparian scrub which have the potential to increase overall habitat values at the proposed site through implementation of a habitat restoration plan after construction**

concludes. This area would also provide similar habitat for sensitive species known to occur in the project area including coast horned lizard, burrowing owls, and the lark sparrow.

With the removal of rock slope protection from the project design, the addition of the drainage berm spoil pile and northern roadway, and the conversion of the bypass system to an underground system (see Project Description Changes above), Table 3-16 on page 3-45 would be updated as follows:

Table 3-16. Summary of the Acreage of Temporary and Permanent Impacts by Vegetation Type (in acres)

Vegetation Type[2]	Temporary	Permanent	Permanent (Spoil #2)
Cultivated Trees[3]	~~2.4~~3.7	~~1.3~~None	None
Dry Meadow	0.7	None	None
Herbaceous Succession	~~24.6~~27.8	~~102.8~~ 107	15.1
Rabbitbrush Succession	~~5.3~~9.2	~~70.2~~74.4	1.9
Terrace Grassland	5.2	~~2.9~~ 1.5	None
Upland Succession	None	0.7	None
Wash Scrub Succession	~~9.6~~12.0	~~10.9~~1.3	None
Unvegetated or unsurveyed[4]	~~16.7~~17.9	~~9.7~~8.1	None
TOTAL AFFECTED	~~64.5~~76.5	~~198.5~~ 193	17

Note(s)
(1) These numbers are approximate since the interpretation of limits between vegetation types is somewhat subjective.
(2) For a detailed description of all vegetation types found within the survey area see Appendix C.1.
(3) The cultivated trees vegetation type refers to a few tamarisk planted at the bottom of the lower part of the unnamed drainage.
(4) Includes the aqueduct and the eastern portion of access roads that were outside the survey area. Temporary roads are existing roads that have become overgrown or new roads located in rabbitbrush succession and herbaceous succession that will be revegetated when construction is complete.

With the removal of rock slope protection from the project design, the addition of the drainage berm spoil pile and northern roadway, and the conversion of the bypass system to an underground system (see Project Description Changes above), Mitigation Measure BIO-4 on page 3-47 would be updated as follows:

BIO-4 The CDWR shall develop and implement a Habitat Enhancement Plan for an acreage equivalent to **at least** 1.~~1~~ acre~~s~~ for every acre of habitat permanently affected by the project (i.e., ~~215.5~~ **210** acres). The enhancement area shall be located approximately southwest of the proposed Tehachapi East Afterbay project site incorporating part of the Oso Creek drainage. The goal of the Plan shall be to improve habitat resources similar to those that will be lost at the proposed project site. Some of the measures that shall be considered include installation of owl boxes or burrows, establishment of woody species or other plant species suited to existing hydrological conditions along the Oso Creek drainage, restoration of soil flora and fauna, reestablishment of hydrological connections, and control of exotics. Species known to already exist at the site based on survey lists provided in Appendix C or from other surveys within the project area shall be preferred in any revegetation effort. The Plan shall also consider the feasibility and effectiveness of transplanting plants or collection of seed from plants that will be impacted by the project footprint. The Plan shall provide measures to address incidental disturbance or impacts caused by implementation of any of the enhancement measures identified in the Plan. The Plan shall also incorporate mitigation measures BIO-14 and BIO-15 as well as other measures to improve habitat quality within the enhancement area. The Plan shall be submitted to the California Department of Fish and Game (CDFG) for their review.

Mitigation measure BIO-5 on page 3-48 has been updated to reflect minor revisions.

BIO-5 Pre-construction bird surveys shall be conducted to identify the presence of breeding pairs or active nests of special status bird species, species protected by the Migratory Bird Treaty Act (MBTA), or species protected by the California Fish and Game Code, within the project and construction footprint plus an additional buffer distance of 500 feet. The surveyed area, including the 500-foot buffer, shall also include existing and newly proposed access roads to the project site. Existing roads need to be included in the survey because of the anticipated increase in traffic disturbance and because portions of some existing roads are overgrown with vegetation. In the event that surveys indicate habitat occupied by breeding pairs or active nests of special status bird species, species protected by the MBTA, or species protected by the California Fish and Game code within 500 feet of the project or construction footprint, some or all of the following measures shall be implemented:

- The occupied area plus an additional no disturbance zone will be flagged and/or fenced until a qualified biologist has determined that all young have fledged. The size of the no disturbance zone shall be determined in consultation with the CDFG and/or the United States Fish and Wildlife Service (USFWS).
- **To the extent feasible, ~~C~~c**learing and grubbing of vegetation shall be conducted during the months prior to March 1 and after July 30. CDWR shall consult with CDFG and USFWS when work schedules conflict with this general guideline and impacts to nesting birds protected under the MBTA or the California Fish and Game Code are imminent.
- Where ambient noise levels are less than 60 dBA and it is determined that construction related noise will cause noise levels to exceed 60 dBA, or where the ambient noise levels are greater than 60 dBA and it is determined that construction related noise will cause noise levels to exceed the ambient level by 5 dBA, a temporary sound wall shall be constructed between the sensitive area and the construction related noise source. Monitoring shall be conducted at 50 feet and 100 feet from the sound wall or at the boundary of the sensitive habitat if the habitat is more than 100 feet from the construction site. This measure would be applicable to survey areas that yield positive results and would be limited to the breeding and nesting season for the sensitive bird species identified in the surveys.
- Night lighting shall be carefully aimed, shielded and of the minimum reasonably necessary intensity to reduce illumination spillover from work areas that may impact migratory birds or plants and animals, in general.
- If an active bird nest will be affected by construction activities within 500 feet of the nest, work shall be temporarily suspended within an appropriate buffer area as designated by the CDWR Mitigation Monitor.

Mitigation measure BIO-10 on page 3-49 has been updated to reflect minor revisions.

BIO-10 Focused surveys for the coast horned lizard shall be conducted within the unnamed drainage and the alluvial floodplain to the east, south of spoil pile #1, that present suitable habitat conditions for the lizard and that may be temporarily disturbed during construction and permanently affected by the bypass, access roads and rock slope protection. Surveys shall be conducted in ~~September/October~~ **the fall of** 2004 when the species is more active prior to winter hibernation. The surveys shall be conducted using established protocols to maximize the likelihood of observing the species, and shall rely on a combination of several walking surveys at times of the day when coast horned lizards are most active and scat surveys to indirectly estimate population size. The objective of the surveys is to estimate the

extent of occupied habitat that overlaps with temporarily and permanently impacted areas. The estimated occupied area will be delineated on a map, flagged in the field and made available to all project personnel. This measure shall be planned and implemented in coordination with CDFG.

Mitigation measure BIO-12 on page 3-50 has been updated to correct the references to previous mitigation measures.

BIO-12 Despite the fact that exclusion, capture and relocation measures typically implemented to reduce impacts to coast horned lizards would be relatively ineffective during the winter months when the initial ground disturbance will occur, CDWR will consult with the CDFG to determine if such measures may still be implemented in such a way as to have a partial effect on reducing impacts to coast horned lizards. In addition, a Biological Monitor(s) will be present to capture coast horned lizards that are disturbed from their habitat and that are at risk during the initial ground disturbance. A protocol will be established in coordination with CDFG prior to ground disturbance to define the method of capture, handling and relocation of any coast horned lizards. Surveys defined in ~~BIO-9 and~~ BIO-10 **and BIO-11** will assist in establishing whether suitable relocation habitat may exist within the enhancement area defined in BIO-4.

Upon further consideration and consultation with resource experts, the CDWR determined that impacts to non-avian species during operation of the proposed project would be less than significant. Therefore, Mitigation measure BIO-13 is no longer necessary to address a potentially significant impact. The last two paragraphs on pages 3-50 and 3-51 have been revised as follows:

During operation non-avian wildlife may also accidentally enter the proposed project facilities and may not be able to exit, resulting in accidental death. **To limit accidental deaths of non-avian wildlife and reduce impacts to sensitive species to less-than-significant levels, the proposed project area would be fenced, similar to the existing Aqueduct facilities.**

In conclusion, it is unlikely that the proposed project site would attract sustainable populations of sensitive species, especially fish or waterfowl, because the aquatic habitat provided by the proposed reservoir is relatively poor **and would be fenced to limit access to non-avian wildlife**. Therefore, the potentially significant impact to sensitive species or their habitat during the operational phase of the proposed project would be reduced to a less-than-significant level ~~with the following mitigation measure~~ (**Class III**).

~~**BIO-13** Fine-mesh or metal exclusion fence shall be added to the bottom 18 inches of the reservoir fence to reduce entry of small mammals and reptiles.~~

Mitigation measure BIO-16 on page 3-52 has been updated to reflect minor revisions.

BIO-16 Temporary improvements that may be needed for the southern project access where it across Oso Creek shall be done while the drainage is dry. Because this is an ephemeral drainage, ~~it is feasible to carry out any~~ improvements **can be made** while the drainage is dry without the need to divert flows. **To the extent feasible,** ~~V~~**v**ehicles shall not be driven

or equipment operated in water-covered portions of a stream or where riparian vegetation or aquatic organisms may be destroyed. The CDFG shall be consulted when construction activities can-not avoid water diversion.

Section 3.2.4.4 – Impact and Mitigation Summary (Biological Resources)

Table 3-17 on page 3-53 has been modified as follows:

Table 3-17. Impact and Mitigation Summary – Biological Resources

Proposed Project Impact	Class	Mitigation Measures
Project construction or operation may affect habitat used by bird species that are federal and/or state species of concern, protected by the Migratory Bird Treaty Act and protected by the California Fish and Game code; sensitive or special status species may be present in the area at the time of construction or during operational activities.	II	BIO-1 through BIO-9
Project construction is likely to affect the coast horned lizard and its habitat; mitigation measures that can feasibly be implemented will not be completely successful in avoiding a loss of individuals and their habitat.	I	BIO-1 through BIO-4, and BIO-8 through BIO-12
Project operation will affect sensitive species and their habitat.	~~II~~ III	~~BIO-13~~ None required.
Project construction will affect segments of the unnamed drainage and Oso Creek, which are under the jurisdiction of the California Department of Fish and Game.	II	BIO-14 through BIO-18
The project would not Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.	III	None required.
There are no federally protected wetlands within the project area.	No Impact	None required.
There are no local policies or ordinances protecting biological resources that apply to the project site.	No Impact	None required.
There are no lands dedicated to a Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan that overlap with the project area or that may be affected by project actions.	No Impact	None required.

Delete Figures 3-7 and 3-8 following page 3-53. These figures appear in their correct locations on pages 3-31 and 3-33, respectively.

Section 5.5.3 – Agricultural Resources

Section 5.5.3 starting on page 5-12 has been revised as follows:

Some of the lands proposed for acquisition for the proposed project are currently under a Williamson Act contract**.** ~~, which is a contract between governments and private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use.~~ **The California Land Conservation Act of 1965, which is commonly referred to as the Williamson Act, was designed to preserve agricultural lands and open space. Under the Williamson Act, local governments enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use.** In exchange, landowners receive reduced property tax assessments, which are much lower than normal, as they are based upon farming and open space uses as opposed to full market value. The Williamson Act (Government Code Section 51291) includes provisions for an agency to notify the Director of the Department of Conservation of the possible acquisition of land enrolled in a Williamson Act contract for a public improvement. **The local governing body responsible for the administration of the agricultural preserve (in this case, Kern**

County) must also be notified. Acquisition of the land would not require findings as stipulated in Government Code section 51292 because of an exception for State Water Facilities discussed in Government Code section 51293(h).

Furthermore, Section 51295 of the Government Code states in part "when that land is acquired in lieu of eminent domain for a public improvement by a public agency or person…the contract shall be deemed null and void as to the land actually being condemned, or so acquired as of the date the action is filed." Section 51295 further states, in part, that "If, after acquisition, the acquiring public agency determines that it will not for any reason actually locate on that land or any part thereof, the public improvement for which the land was acquired, before returning the land to private ownership, the public agency shall give written notice to the Director of Conservation and the local governing body responsible for the administration of the preserve." Because the Williamson Act allows acquisition of contract land for public improvements (subject to the notification procedure described above), the acquisition of such land for the proposed project would not conflict with the Williamson Act contract.

The Williamson Act contract, which covers portions of the proposed project site, was established in February 1968 between Kern County and the Tejon Ranch Company (Tejon 2004). The ~~existing~~ conservation contract **originally** include**d**~~s~~ 2,866.58 acres in Kern County (Agricultural Preserve number 19) (CDWR 2004c)**. The total acreage currently remaining under contract is 1,458.74 acres (CDWR 2004l).**~~, of which the proposed project would permanently affect up to 198.5, and potentially more if the supplemental spoil area were to be used.~~ **Of the approximately 340 acres the CDWR would purchase specifically for the proposed project, 311.82 acres would be removed from the existing Williamson Act contract (CDWR 2004l).**

According to the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), the land impacted by the proposed project is classified as Grazing Land, and is neither Prime Farmland nor a Farmland of Statewide Importance (CDOC 2004). The proposed project would convert approximately 340 acres zoned for agricultural use to a non-agricultural use, but this conversion would not represent a substantial loss because the land has not been recently cultivated as Farmland and the acreage involved would be negligible. Therefore, the proposed project would not constitute a significant impact to agriculture resources. ~~The Williamson Act allows acquisition of contract land for public improvements (subject to notification) and the acquisition of such land for the proposed project would not conflict with the Act.~~

Section 5.5.7 – Hydrology and Water Quality

The first paragraph on page 5-18 has been revised as follows:

The Tehachapi East Afterbay Project would be located on the foothills of the Tehachapi Mountains. Three major washes are located in immediate vicinity of the proposed project site: Oso Canyon, Los Alamos Creek, and Little Sycamore Canyon. Oso Creek, the largest of the three streams, has a drainage area of approximately 20 square miles. It crosses the West Branch of the California Aqueduct at the Oso Siphon and runs west to east, across the proposed project's access roads located approximately 1,000 feet to the southwest of the proposed project site. Los Alamos Creek drainage area covers approximately four square miles and flows west of the Carley V. Porter Tunnel South Portal to the Oso Siphon.

Sycamore Creek has a watershed area of 5.5 square miles. The wash drains through an overchute approximately 2,500 feet west of the proposed project site and proceeds south to Oso Creek. While the overall drainage pattern of the area has been previously altered by the construction of the California Aqueduct, the proposed project would not substantially alter existing drainage patterns in the area. **A drainage berm spoil pile would be located immediately north of the proposed reservoir to reduce erosion of the cut slope above the reservoir during operations, and divert runoff from the north either east towards the Big Sycamore Canyon drainage channel or west to the unnamed natural drainage channel. To protect the side slopes for both the unnamed natural drainage channel and Big Sycamore Canyon, drainage would be conveyed into an 18" corrugated metal pipe (CMP), which would take flows down the bank to the channel bottom. The outflow from the 18" CMP would discharge to a 10-foot by 10-foot area covered by rip rap (rock slope protection).**

A Streambed Alteration Agreement would be obtained for any improvements to the access road that crosses Oso Creek to reduce impacts to local hydrology. Similarly, the proposed project would not cause any erosion or siltation in the area, nor would it increase the rate or amount of surface water runoff from the site. No impacts would occur.

Section 5.5.8 – Land Use Planning

The last paragraph on page 5-19 has been revised as follows:

A portion of the proposed project site is currently under a Williamson Act contract, which was established in February 1968 between Kern County and the Tejon Ranch Company. The conservation contract include**d**~~s~~ 2,866.58 acres in Kern County (Agricultural Preserve number 19) (CDWR 2004c)**. The total acreage currently remaining under contract is 1,458.74 acres (CDWR 2004l).**~~, of which the proposed project would permanently affect up to 198.5 acres, and potentially more if the supplemental spoil area were to be used.~~ **Of the approximately 340 acres the CDWR would purchase specifically for the proposed project, 311.82 acres would be removed from the existing Williamson Act contract (CDWR 2004l).** The California Department of Conservation and Kern County would be notified regarding the acquisition of land currently under Williamson Act contract. In addition, portions of the proposed project footprint would lie within a Federal Energy Regulatory Commission (FERC) jurisdictional boundary. Authorization to encroach on FERC Project No. 2426 boundaries would be required.

Section 7 – References

An additional reference was added to incorporate new information provided regarding the land currently remaining under Williamson Act Contract.

CDWR (California Department of Water Resources). 2004. Email from Linus Paulus of CDWR to Angela Bonfiglio, "RE: Williamson Contract". November 17.